

#### JOINT LEGISLATIVE TASKFORCE ON WATER RESOURCE MITIGATION DECEMBER 8, 2021

# WATER REUSE

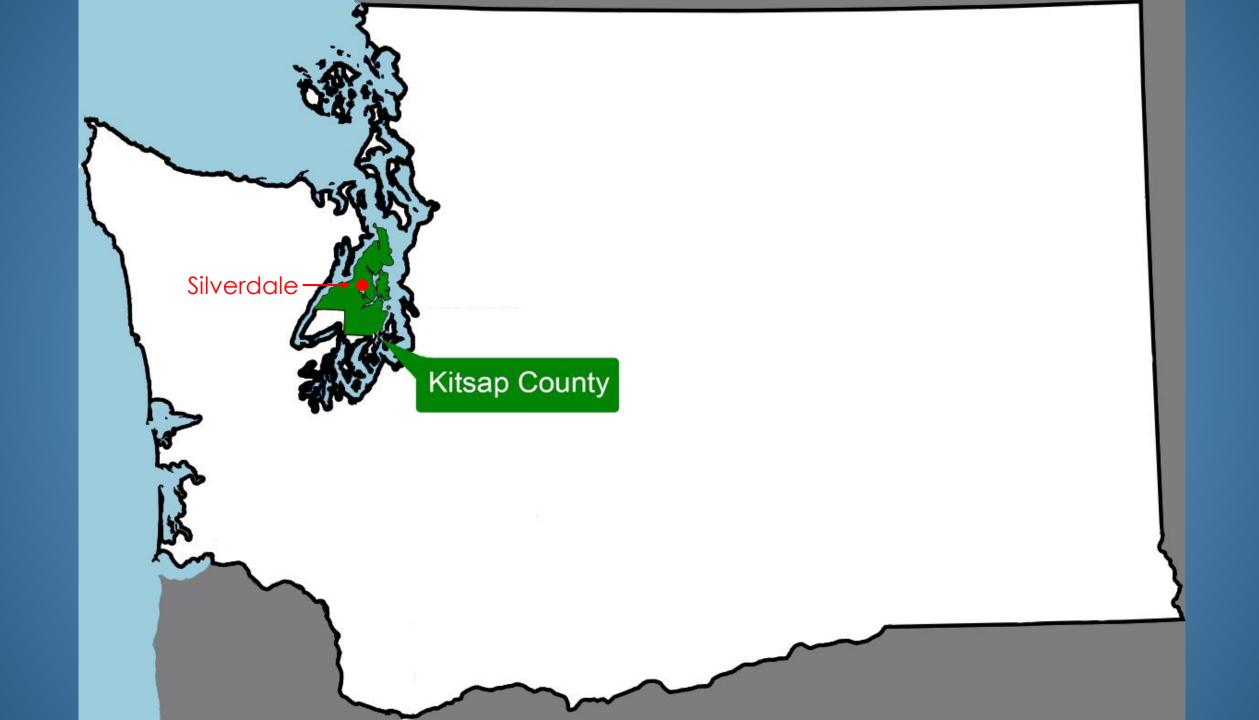


COMMISSIONER MARCUS HOFFMAN

COMMISSIONER JOHN POPPE

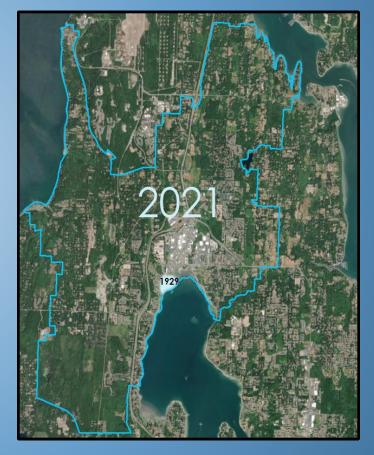
Commissioner Joy Ramsdell

GENERAL MANAGER MORGAN JOHNSON



#### SILVERDALE WATER DISTRICT

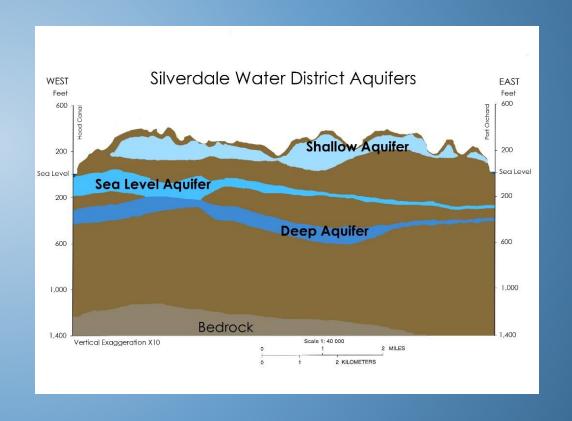
- FORMED IN 1929
- Current population served -25,000
- Service area 25.8 square miles
- 170 MILES OF WATER MAIN
  - 161.7 MILES POTABLE MAIN; 8.3 MILES RECYCLED MAIN
- 6,780 SERVICE CONNECTIONS
- 12 ACTIVE WELL SOURCES
- DISTRICT WATER RIGHTS OVER 8,500 ACRE FT.
- 12 ABOVE-GROUND STEEL RESERVOIRS
  - ~8 MG of Potable water storage



Silverdale Water District Service Area 1929 and Present

#### SILVERDALE WATER DISTRICT SOURCES

- THREE DISTINCT AQUIFERS
  - SHALLOW AQUIFER
  - SEA LEVEL AQUIFER
  - DEEP AQUIFER
- 100% RAINFALL RECHARGE



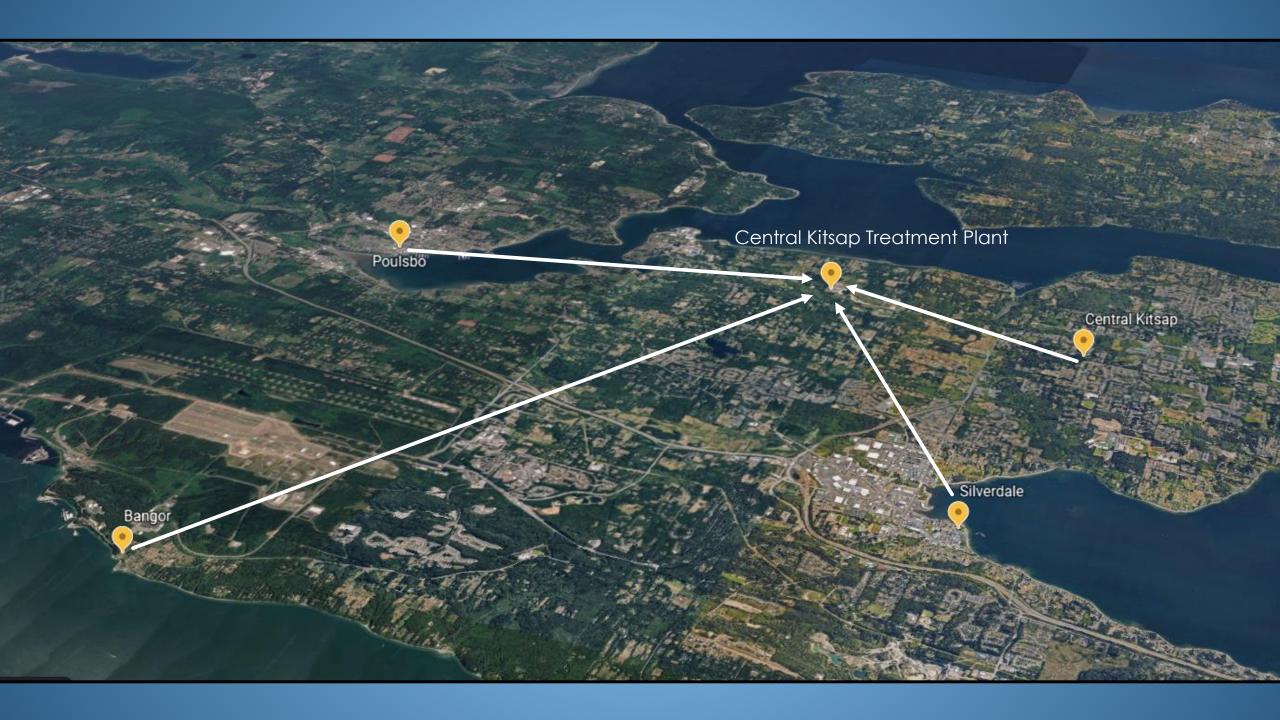
#### KITSAP COUNTY GROWTH

- CURRENT POPULATION: 275,611
- EST. POPULATION IN 2040: 363,928
  - ANTICIPATED **24%** INCREASE



Kitsap Sun – 07.11.2018





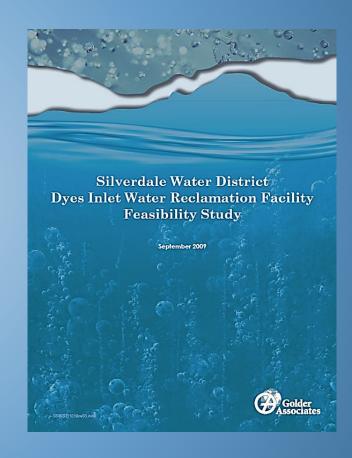
#### CENTRAL KITSAP TREATMENT PLANT

- 3.4 MGD of SEWAGE
- 2015 \$35 M PLANT IMPROVEMENT PROJECT
- WILL PRODUCE CLASS-A RECYCLED WATER
- TREATED WATER CURRENTLY DISCHARGED INTO PUGET SOUND
  - 3,200 FT. OFFSHORE
  - 46 FT. BELOW SURFACE

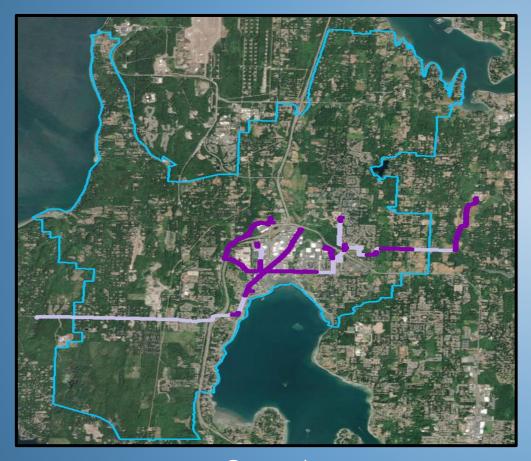


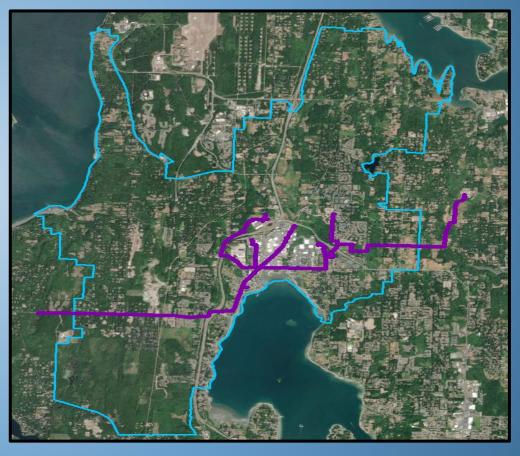
## COMPLETED ACTIONS

- 2009 FEASIBILITY STUDY
  - \$250,000 GRANT (ECOLOGY)
- 2009 INITIAL RECYCLED WATER MAIN INSTALLATION IN SILVERDALE (949 FT.)
- 2021 43,915 FT. RECYCLED WATER
  MAIN INSTALLED (8.3 MILES) TO DATE



## RECYCLED INFRASTRUCTURE





Current

Future

#### RECYCLED WATER USAGE

Nearly 26 MG purple pipe water used (Jan – Oct 2021)

- CENTRAL KITSAP MIDDLE & HIGH SCHOOLS ST. MICHAEL MEDICAL CENTER
  - Completed in 2020; constructed with RECYCLED WATER FOR IRRIGATION
  - USED OVER 7 MG OF PURPLE PIPE WATER FROM January – October 2021
- YMCA SILVERDALE
  - COMPLETED IN 2011; DUAL PLUMBING FOR TOILETS AND IRRIGATION
  - USED OVER 2.2 MG OF PURPLE PIPE WATER FROM JANUARY - OCTOBER 2021

- - COMPLETED IN 2021; DUAL PLUMBING FOR TOILETS AND IRRIGATION
  - USED OVER 8.6 MG OF PURPLE PIPE WATER FROM JANUARY - OCTOBER 2021
- OTHER RECYCLED WATER CUSTOMERS
  - 8.1 MG USED FROM JANUARY OCTOBER 2021

#### GOALS

- REDUCE PEAK DAY DEMAND OF 5.5 MG GALLONS BY 1 MG (18%)
  - Represents ability to serve approximately 2,000 residential connections without obtaining additional water rights
- AUGMENT ISLAND LAKE WITH RECYCLED WATER
- CENTRAL KITSAP TREATMENT PLANT
  - GOAL: ZERO DISCHARGE INTO PUGET SOUND

## WATER RESOURCE INVENTORY AREA (WRIA) 15

- STREAMFLOW AUGMENTATION AND AQUIFER RECHARGE
  - DICKEY PIT, ASBURY SOILS,
    NEWBERRY HILL POND
  - INFILTRATE APPROXIMATELY 0.5 MGD



WRIA 15 Augmentation Sites

# FUNDING

- GRANTS
- SILVERDALE WATER DISTRICT
- PARTNERSHIPS
- Public Works Trust Fund



## **PARTNERSHIPS**

- KITSAP COUNTY
  - CENTRAL KITSAP TREATMENT PLANT
  - PUBLIC WORKS
- SILVERDALE YMCA
- ST. MICHAEL MEDICAL CENTER
- CENTRAL KITSAP SCHOOL DISTRICT
- KITSAP PUBLIC UTILITY DISTRICT
- University of Washington















# COMMUNITY LEADERS & ELECTED OFFICIALS SUPPORTING OUR EFFORTS

- U.S. Congressman Derek Kilmer, Washington 6<sup>th</sup> District
- KITSAP COUNTY COMMISSIONERS ED WOLFE AND ROBERT GELDER
- CHI Franciscan Market President/SVP of Operations David Schultz
- Washington environmental council Puget Sound Director Mindy Roberts
- KITSAP REGIONAL LIBRARY DIRECTOR JILL JEAN
- Kitsap Economic Development Alliance Executive Director John Powers (former)
- CENTRAL KITSAP SCHOOL DISTRICT SUPERINTENDENT DAVID MCVICKER (RETIRED)
- YMCA of Pierce/Kitsap Counties Regional Director Geoff Ball (former)
- Mentor Law Group Joe Mentor, Jr



# **QUESTIONS**?